

DEPARTMENT OF SCIENCE

COURSE OUTLINE – Fall 2019

NS1500 - Anatomy and Physiology - 6(6-0-0) 90 Hours 15 Weeks

INSTRUCTOR: Dr. Sean Irwin, Ph.D. **PHONE:** 539-2860 (W); 567-2226 (H)

OFFICE: J 224 **E-MAIL:** sirwin@gprc.ab.ca

OFFICE HOURS: Tues. and Thurs. 1 - 2:30 pm or by appointment

CALENDAR DESCRIPTION:

NS1500 6 (6-0-0) UT 90 Hours 15 Weeks

Introduction to the structure of the human body and an introduction to human physiology. Notes: Available only to Nursing students.

PREREQUISITE(S)/COREQUISITE: Biology 30 and Chemistry 30 or equivalents.

REQUIRED TEXT/RESOURCE MATERIALS:

Saladin, K.S. (2018), <u>Anatomy and Physiology: The Unity of Form and Function, 8th ed.</u>, (or 7th ed. 2015) WCB / McGraw-Hill, Boston MA, ISBN 9781259277726

DELIVERY MODE(S): Lectures – A2: Mon. and Wed. 8:30 – 11:20, H211

B2: Tues. and Thurs. 10 – 12:50, A210

LEARNING OUTCOMES:

Upon successful completion of this course, a student will have a working knowledge of the structure and function of the human body.

COURSE OBJECTIVES:

- 1. To gain further understanding of the structure and function of the human body.
- 2. To develop critical thinking skills with respect to the anatomy and physiology of the human body.
- 3. Integrate clinical situations with the underlying physiological principles and concepts.
- 4. Demonstrate critical thinking skills in relation to the study of physiology.
- 5. To gain an understanding of anatomy and physiology that will facilitate future work in the medical field.

TRANSFERABILITY:

UA, UC, UL, AU, GMU

Please note that a grade less than C+ is not accepted for transfer to the U of A for NURS 106 (previously NURS 140 and 150). A minimum grade of C+ is required to receive credit in NS1500.

*Warning: Although we strive to make the transferability information in this document upto-date and accurate, the student has the final responsibility for ensuring the transferability of this course to Alberta Colleges and Universities. Please consult the Alberta Transfer Guide for more information. You may check to ensure the transferability of this course at Alberta Transfer Guide main page http://www.transferalberta.ca or, if you do not want to navigate through few links, at

http://alis.alberta.ca/ps/tsp/ta/tbi/onlinesearch.html?SearchMode=S&step=2

EVALUATIONS:

Exam I 20% - In order to defer an exam due to Exam II 22.5% illness you will require a medical

Exam III 22.5% note.

Final Exam 30%Completed Study Aid 5%Total 100%

^{**} Grade of D or D+ may not be acceptable for transfer to other post-secondary institutions. Students are cautioned that it is their responsibility to contact the receiving institutions to ensure transferability

GRADING CRITERIA:

Please note that the University of Alberta requires a C+ in this course to transfer as a Nursing course.

Alpha	4-point	Percentage	Alpha	4-point	Percentage
Grade	Equivalent	Guidelines	Grade	Equivalent	Guidelines
A+	4.0	90-100	C+	2.3	67-69
A	4.0	85-89	С	2.0	63-66
A-	3.7	80-84	C-	1.7	60-62
B+	3.3	77-79	D+	1.3	55-59
В	3.0	73-76	D	1.0	50-54
B-	2.7	70-72	F	0.0	00-49

COURSE SCHEDULE/TENTATIVE TIMELINE:

Week	Topic	Chapter
1	Introduction to anatomy; The Chemistry of Life	2
	- Orientation to Human Anatomy	Atlas A
	Introduction to physiology; Homeostasis and Feedback mechanisms - Enzymes and Metabolism	1
2	Anatomy of the Cell and Histology	3 and 5
	Membrane Transport and Cellular respiration Cellular Function – Protein Synthesis and DNA Replication	4 and 26
3	The Integumentary System	6
	Bone Tissue	7
4	Exam I - Sept. 25 – A2; Sept. 26 – B2	Weeks 1 -3
	The Axial and Appendicular Skeletal Systems	8
	Selected Joints	9
5	The Muscular System	10

	Muscle Tissue	11
6	The Spinal Cord and Spinal Nerves	13
	Nervous Tissue	12
	- Somatic Reflexes	
7	Exam II – Oct. 16 – A2; Oct. 17 – B2	Weeks 4 -6
	The Brain and Cranial Nerves	14
	- CNS Function and Processing	
	The Autonomic Nervous System	15
8	Sense Organs	16
	The Endocrine System	17
	The Circulatory System: Blood	18
9	The Lymphatic and Immune System	21
10	Exam III – Nov. 6 – A2; Nov. 7 – B2	Weeks 7 – 9
	The Circulatory System: The Heart	19
	The Circulatory System: Blood Vessels	20
11	The Respiratory System	22
	The Urinary System	23
12	The Digestive System	25
	The Female Reproductive System	27
13	The Female Reproductive System	27
	The Male Reproductive System	28
14	Human Development	29
	Final Exam (Scheduled by the Registrar's Office)	Weeks 10 - 14

STUDENT RESPONSIBILITIES:

The College Policy on Students Rights and Responsibilities can be found at https://www.gprc.ab.ca/about/administration/policies/

STATEMENT ON PLAGIARISM AND CHEATING:

Cheating and plagiarism will not be tolerated and there will be penalties. For a more precise definition of plagiarism and its consequences, refer to the Student Conduct section of the College Calendar at http://www.gprc.ab.ca/programs/calendar/ or the College Policy on Student Misconduct: Plagiarism and Cheating at https://www.gprc.ab.ca/about/administration/policies

**Note: all Academic and Administrative policies are available on the same page.